

## **Restaurant-associated Behavior from the FoodNet Population Survey, 1998-99**

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**Background:** A large proportion of foodborne outbreaks reported in the United States are associated with restaurants, but little is known about risk factors for sporadic acute gastrointestinal illness associated with restaurants. It is estimated that 46% of the average U.S. household's food-dollar is spent in restaurants.

**Methods:** From March 1998 through February 1999, the Centers for Disease Control and Prevention's Foodborne Diseases Active Surveillance Network (FoodNet) conducted a random-digit dialing telephone survey to better understand factors potentially associated with acute diarrheal illness. The survey was performed in Connecticut, Minnesota, and Oregon and selected counties within California, Georgia, Maryland, and New York (population 21 million persons). We attempted to interview 150 persons each month in each state. Persons of all ages were eligible. Respondents were asked about restaurant patronage in the past 7 days and food preferences.

**Results:** The questionnaire was administered to 12,755 persons. Of these, 463 (4%) reported eating at a fast food or sit-down restaurant frequently ( $\geq 7$  times in the past 7 days). Among males, 7% ate out frequently as compared to 3% of females ( $p < 0.001$ ). Over 10% of persons between the ages of 16 and 25 years of age and 6% of young adults (26-45 year-olds) ate out frequently. Blacks (7%) were more likely to eat out  $\geq 7$  times in the previous week than whites (4%,  $p < 0.001$ ). Of all respondents, 10% ordered their restaurant hamburgers cooked rare or medium-rare. Of these, 87% considered a hamburger having pink on the inside to be cooked, compared to 20% of those who ordered medium, medium-well, or well-done restaurant hamburgers ( $p < 0.001$ ). One third (33%) of rare or medium-rare hamburger eaters cut their hamburgers to check how they were cooked as compared with two-thirds (66%) of non-rare hamburger customers ( $p < 0.001$ ).

**Conclusions:** A large proportion of this survey's respondents ate  $\geq 7$  meals per week at fast food and sit-down restaurants. A substantial number of respondents admit to preferring established higher-risk foods, such as undercooked hamburgers, when they eat out. Further studies are necessary to explore the association between frequent restaurant patronage and acute diarrheal illness.

### **Suggested citation:**

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